What is claimed is:

1. A method for treating a crystal having nonlinear optical properties, in particular a lithium niobate crystal or lithium tantalate crystal, the crystal containing foreign atoms which bring about specific absorption of incoming light, the foreign atoms being converted to a lower valency state by oxidation,
wherein the electrons liberated during oxidation are removed from the crystal with the aid of an external current source.

2. The method as recited in Claim 1,
wherein the oxidation is assisted by applying thermal energy and an electric field to the crystal.

3. The method as recited in Claim 1 or 2,
wherein the foreign atoms are doping elements which were provided to the crystal by doping prior to the assisted oxidation.

4. The method as recited in Claim 3,
wherein the assisted oxidation converts the doping elements to the lowest possible valency state.

5. The method as recited in one of the preceding claims,
wherein the doping elements are extrinsic ions, in particular iron, copper, and/or manganese ions in a concentration of more than $1 \times 10^{25} m^{-3}$, said ions increasing the dark conductivity of the crystal.

6. The method as recited in one of the preceding claims,
wherein the crystal is placed between two electrodes, in particular between two metal electrodes, which are connected to a voltage source.

7. The method as recited in Claim 6,
wherein one of the electrodes takes the form of a corona electrode which is not in contact with the crystal, the corona electrode, in particular, being connected to the negative terminal of the voltage source.

8. The method as recited in one of the Claims 6 and 7,
wherein a voltage between 1 V und 1200 V is applied between the electrodes, this voltage in particular being about 1000 V in the case of a corona electrode, and in particular about 10 V in the case of two contacting electrodes.

9. The method as recited in one of the preceding claims,
wherein currents of between 0.01 mA and 15 mA, in particular of between 1 mA and about 10 mA, are generated in the crystal by applying the electric field.

10. The method as recited in one of the preceding claims,
wherein the application of thermal energy leads to temperatures between 300 °C and 1200 °C, in particular between 800 °C and 900 °C.

11. An, in particular, nonlinear optical component comprising a crystal having nonlinear optical properties, the crystal containing foreign atoms which bring about specific absorption of incoming light, the foreign atoms being converted to a lower valency state by the assisted oxidation according to one of the preceding claims,
wherein the crystal has a the **[sic. a]** residual absorption of less than 0.4 mm^{-1}.